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IFW

June 28, 2004

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Re: U.S. Patent Application No.: 10/645746  
For: RNA INTERFERENCE PATHWAY GENES AS TOOLS FOR  
TARGETED GENETIC INTERFERENCE  
Inventors: Mello, Craig C. *et al.*  
Filed: August 20, 2003  
Our Ref. No.: UMY-052DV1

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement;
2. PTO Form 1449;
3. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450:

June 28, 2004

Date

Debra J. Milasincic, Esq., Reg. No. 46,931

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP

Debra J. Milasincic, Esq.  
Registration No. 46,931  
Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Mello, Craig C. *et al.*

Serial No.: 10/645746

Filed: August 20, 2003

For: RNA INTERFERENCE PATHWAY GENES AS  
TOOLS FOR TARGETED GENETIC  
INTERFERENCE

Attorney Docket No.: UMY-052DV1

Group Art Unit: 1637

Examiner: Strzelecka, T.E.

MS Amendment  
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Alexandria, Virginia 22313-1450

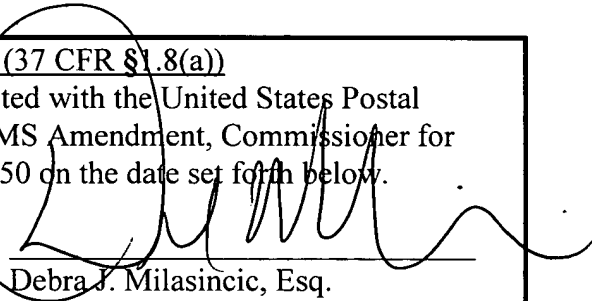
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June 28, 2004

Date of Signature and of Mail Deposit

By:

  
Debra J. Milasincic, Esq.  
Registration No. 46,931  
Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

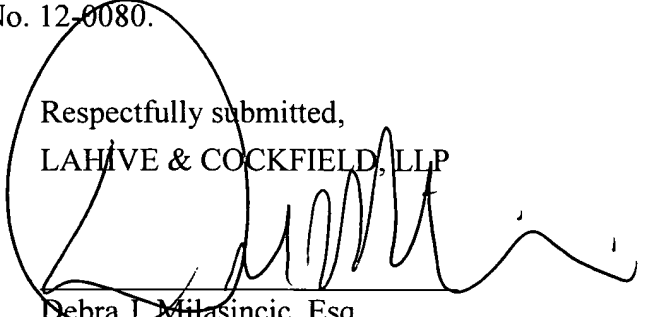
Applicants and their Attorney are aware of the following patents, publications or other information, which are cited on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration.

The present application is a Divisional Application of U.S. Serial No. 09/689992, filed October 13, 2000 (Atty. Docket No. UMY-052). All references listed on the enclosed PTO Form 1449 have been previously cited by or submitted to the Office in the prior application, and, in accordance with 37 CFR §1.98(d), copies of these references are not enclosed herewith, but will be provided upon request.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Under 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP



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APPLICANT FACSIMILE OF FORM PTO-1449

REV 7-80

U.S. DEPARTMENT OF  
COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY DOCKET NO.

UMY-052DV1

SERIAL NO.

10/645746

LIST OF PUBLICATIONS CITED BY APPLICANT  
(Use several sheets if necessary)

APPLICANT

Mello, Craig C. *et al.*

FILING DATE

August 20, 2003

GROUP

1637

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	4,469,863	09/84	Ts'o <i>et al.</i>			
	A2	4,511,713	04/85	Miller <i>et al.</i>			
	A3	5,034,323	07/91	Jorgensen <i>et al.</i>			
	A4	5,107,065	04/92	Shewmaker			
	A5	5,190,931	03/93	Inouye			
	A6	5,208,149	05/93	Inouye			
	A7	5,258,369	11/93	Carter			
	A8	5,272,065	12/93	Inouye			
	A9	5,365,015	11/94	Grierson <i>et al.</i>			
	A10	5,453,566	09/95	Shewmaker			
	A11	5,738,985	04/98	Miles			
	A12	5,795,715	08/98	Livache			
	A13	5,874,555	02/99	Dervan			
	A14	5,976,567	11/99	Wheeler <i>et al.</i>			
	A15	6,010,908	01/00	Gruenert <i>et al.</i>			
	A16	6,136,601	10/00	Meyer, Jr. <i>et al.</i>			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	A17	WO 98/54315	12/98	WO				
	A18	WO 98/04717	02/98	WO				
	A19	WO 99/32619	07/99	WO				
	A20	WO 99/53050	10/99	WO				
	A21	WO 99/61631	12/99	WO				
	A22	WO 00/01846	01/00	WO				
	A23	WO 00/63364	10/00	WO				

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	A24	Baker <i>et al.</i> RNAi of the receptor tyrosine phosphatase HmLAR2 in a single cell of an intact leech embryo leads to growth-cone collapse. <i>Curr Biol.</i> 2000 Sep 7;10(17):1071-4
	A25	Bass. Double-stranded RNA as a template for gene silencing. <i>Cell.</i> 2000 Apr 28;101(3):235-8
Examiner		Date Considered
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APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO	SERIAL NO.
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		<b>UMY-052DV1</b>	<b>10/645746</b>
		APPLICANT <b>Mello, Craig C. et al.</b>	
		FILING DATE	GROUP
		<b>August 20, 2003</b>	<b>1637</b>

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	B1	Bastin <i>et al.</i> Flagellum ontogeny in trypanosomes studied via an inherited and regulated RNA interference system. J Cell Sci. 2000 Sep;113 ( Pt 18):3321-8
	B2	Baulcombe <i>et al.</i> Molecular biology. Unwinding RNA silencing. Science. 2000 Nov 10;290(5494):1108-9
	B3	Baulcombe. Gene silencing: RNA makes RNA makes no protein. Curr Biol. 1999 Aug 26;9(16):R599-601
	B4	Baum <i>et al.</i> Inhibition of protein synthesis in reticulocyte lysates by a double-stranded RNA component in HeLa mRNA. Biochem Biophys Res Commun. 1983 Jul 18;114(1):41-9
	B5	Bhat <i>et al.</i> Discs Lost, a novel multi-PDZ domain protein, establishes and maintains epithelial polarity. Cell. 1999 Mar 19;96(6):833-45
	B6	Billy <i>et al.</i> Specific interference with gene expression induced by long, double-stranded RNA in mouse embryonal teratocarcinoma cell lines. Proc Natl Acad Sci U S A 2001 Dec 4;98(25):14428-33
	B7	Bosher <i>et al.</i> RNA interference: genetic wand and genetic watchdog. Nat Cell Biol. 2000 Feb;2(2):E31-6
	B8	Bosher <i>et al.</i> RNA interference can target pre-mRNA: consequences for gene expression in a <i>Caenorhabditis elegans</i> operon. Genetics. 1999 Nov;153(3):1245-56
	B9	<i>C. elegans</i> Sequencing Consortium, The. Genome Sequence of the Nematode <i>C. elegans</i> : A Platform for Investigating Biology Science. 11 Dec. 1998 282:2012-2018
	B10	Caplen <i>et al.</i> dsRNA-mediated gene silencing in cultured Drosophila cells: a tissue culture model for the analysis of RNA interference. Gene. 2000 Jul 11;252(1-2):95-105
	B11	Caplen. A new approach to the inhibition of gene expression. Trends Biotechnol. 2002 Feb;20(2):49-51
	B12	Catalanotto <i>et al.</i> Gene silencing in worms and fungi. Nature 2000 Mar 16;404(6775):245
	B13	Chuang <i>et al.</i> Specific and heritable genetic interference by double-stranded RNA in <i>Arabidopsis thaliana</i> . Proc Natl Acad Sci U S A. 2000 Apr 25;97(9):4985-90
	B14	Colussi <i>et al.</i> Debcl, a proapoptotic Bcl-2 homologue, is a component of the Drosophila melanogaster cell death machinery. J Cell Biol. 2000 Feb 21;148(4):703-14
	B15	Denef <i>et al.</i> Hedgehog induces opposite changes in turnover and subcellular localization of patched and smoothened. Cell. 2000 Aug 18;102(4):521-31
	B16	Doi <i>et al.</i> Short-Interfering-RNA-Mediated Gene Silencing in Mammalian Cells Requires Dicer and eIF2C Translation Initiation Factors. Current Biology 8 January, 2003 13:41-46
	B17	Dolnick. Naturally occurring antisense RNA. Pharmacol Ther. 1997 Sep;75(3):179-84
	B18	Domeier <i>et al.</i> A link between RNA interference and nonsense-mediated decay in <i>Caenorhabditis elegans</i> . Science. 2000 Sep 15;289(5486):1928-31
	B19	Driver <i>et al.</i> Oligonucleotide-based inhibition of embryonic gene expression. Nat Biotechnol. 1999 Dec;17(12):1184-7
Examiner		Date Considered
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	C1	Fagard <i>et al.</i> AGO1, QDE-2, and RDE-1 are related proteins required for post-transcriptional gene silencing in plants, quelling in fungi, and RNA interference in animals. Proc Natl Acad Sci U S A 2000 Oct 10;97(21):11650-4
	C2	Fraser <i>et al.</i> Functional genomic analysis of <i>C. elegans</i> chromosome I by systematic RNA interference. Nature. 2000 Nov 16;408(6810):325-30
	C3	Fire <i>et al.</i> RNA-triggered gene silencing. Trends Genet. 1999 Sep;15(9):358-63
	C4	Fire <i>et al.</i> Production of antisense RNA leads to effective and specific inhibition of gene expression in <i>C. elegans</i> muscle. Development. 1991 Oct;113(2):503-14
	C5	Fire <i>et al.</i> Potent and specific genetic interference by double-stranded RNA in <i>Caenorhabditis elegans</i> . Nature. 1998 Feb 19;391(6669):806-11
	C6	Fire <i>et al.</i> On the Generality of RNA-Mediated Interference. Worm Breeder's Gazette. 1998;15(3):8
	C7	Fortier <i>et al.</i> Temperature-dependent gene silencing by an expressed inverted repeat in <i>Drosophila</i> . Genesis. 2000 Apr;26(4):240-4
	C8	GENBANK Accession No. Q22617 for <i>Caenorhabditis elegans</i> November 1, 1996
	C9	Grieson <i>et al.</i> Trends in Biotechnology 1991;9:122-3
	C10	Grishok <i>et al.</i> Genetic requirements for inheritance of RNAi in <i>C. elegans</i> . Science. 2000 Mar 31;287(5462):2494-7
	C11	Guo <i>et al.</i> par-1, a gene required for establishing polarity in <i>C. elegans</i> embryos, encodes a putative Ser/Thr kinase that is asymmetrically distributed. Cell. 1995 May 19;81(4):611-20
	C12	Hammond <i>et al.</i> An RNA-directed nuclease mediates post-transcriptional gene silencing in <i>Drosophila</i> cells. Nature. 2000 Mar 16;404(6775):293-6
	C13	Harbinder <i>et al.</i> Genetically targeted cell disruption in <i>Caenorhabditis elegans</i> . Proc Natl Acad Sci U S A. 1997 Nov 25;94(24):13128-33
	C14	Harcourt <i>et al.</i> Ebola virus inhibits induction of genes by double-stranded RNA in endothelial cells. Virology. 1998 Dec 5;252(1):179-88
	C15	Harfe <i>et al.</i> Analysis of a <i>Caenorhabditis elegans</i> Twist homolog identifies conserved and divergent aspects of mesodermal patterning. Genes Dev. 1998 Aug 15;12(16):2623-35
	C16	Heaphy, S. <i>et al.</i> Viruses, double-stranded RNA and RNA interference. Recent Res. Devel. Virol. 2001;3:91-104
	C17	Hill <i>et al.</i> dpy-18 encodes an alpha-subunit of prolyl-4-hydroxylase in <i>caenorhabditis elegans</i> . Genetics. 2000 Jul;155(3):1139-48
	C18	Hsieh <i>et al.</i> The RING finger/B-box factor TAM-1 and a retinoblastoma-like protein LIN-35 modulate context-dependent gene silencing in <i>Caenorhabditis elegans</i> . Genes Dev. 1999 Nov 15;13(22):2958-70
	C19	Huang <i>et al.</i> The proneural gene amos promotes multiple dendritic neuron formation in the <i>Drosophila</i> peripheral nervous system. Neuron. 2000 Jan;25(1):57-67
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	D1	Hughes <i>et al.</i> RNAi analysis of Deformed, proboscipedia and Sex combs reduced in the milkweed bug <i>Oncopeltus fasciatus</i> : novel roles for Hox genes in the hemipteran head. <i>Development</i> . 2000 Sep;127(17):3683-94
	D2	Hunter. Genetics: a touch of elegance with RNAi. <i>Curr Biol</i> . 1999 Jun 17;9(12):R440-2
	D3	Hunter. Gene Silencing: Shrinking the Black Box of RNAi. <i>Current Biology</i> , 2000, 10:R137-R140
	D4	Izant. Inhibition of Thymidine Kinase Gene Expression by Anti-Sense RNA: A Molecular Approach to Genetic Analysis. <i>Cell. Apr.</i> 1984, 36:1007-1015
	D5	Jacobs <i>et al.</i> When two strands are better than one: the mediators and modulators of the cellular responses to double-stranded RNA. <i>Virology</i> . 1996 May 15;219(2):339-49
	D6	Jorgensen <i>et al.</i> An RNA-based information superhighway in plants. <i>Science</i> . 1998 Mar 6;279(5356):1486-7
	D7	Jorgensen <i>et al.</i> Do unintended antisense transcripts contribute to sense cosuppression in plants? <i>Trends Genet</i> . 1999 Jan;15(1):11-2
	D8	Judware <i>et al.</i> Inhibition of the dsRNA-Dependent Protein Kinase by a Peptide Derived from the Human Immunodeficiency Virus Type 1 Tat Protein. <i>Journal of Interferon Research</i> 1993 13:153-160
	D9	Kelly <i>et al.</i> Chromatin silencing and the maintenance of a functional germline in <i>Caenorhabditis elegans</i> . <i>Development</i> . 1998 Jul;125(13):2451-6
	D10	Kennerdell <i>et al.</i> Heritable gene silencing in <i>Drosophila</i> using double-stranded RNA. <i>Nat Biotechnol</i> . 2000 Aug;18(8):896-8
	D11	Kennerdell <i>et al.</i> Use of dsRNA-mediated genetic interference to demonstrate that frizzled and frizzled 2 act in the wingless pathway. <i>Cell</i> . 1998 Dec 23;95(7):1017-26
	D12	Ketting <i>et al.</i> Mut-7 of <i>C. elegans</i> , required for transposon silencing and RNA interference, is a homolog of Werner syndrome helicase and RNaseD. <i>Cell</i> . 1999 Oct 15;99(2):133-41
	D13	Ketting <i>et al.</i> A genetic link between co-suppression and RNA interference in <i>C. elegans</i> . <i>Nature</i> . 2000 Mar 16;404(6775):296-8
	D14	Kim <i>et al.</i> Positioning of longitudinal nerves in <i>C. elegans</i> by nidogen. <i>Science</i> . 2000 Apr 7;288(5463):150-4
	D15	Klafl <i>et al.</i> RNA structure and the regulation of gene expression. <i>Plant Mol Biol</i> . 1996 Oct;32(1-2):89-106
	D16	Kostich <i>et al.</i> Identification and molecular-genetic characterization of a LAMP/CD68-like protein from <i>Caenorhabditis elegans</i> . <i>J Cell Sci</i> . 2000 Jul;113 ( Pt 14):2595-606
	D17	Kumar <i>et al.</i> Antisense RNA: function and fate of duplex RNA in cells of higher eukaryotes. <i>Microbiol Mol Biol Rev</i> . 1998 Dec;62(4):1415-34
	D18	Lam <i>et al.</i> Inducible expression of double-stranded RNA directs specific genetic interference in <i>Drosophila</i> . <i>Curr Biol</i> . 2000 Aug 24;10(16):957-63
	D19	Lewis <i>et al.</i> Distinct roles of the homeotic genes Ubx and abd-A in beetle embryonic abdominal appendage development. <i>Proc Natl Acad Sci U S A</i> . 2000 Apr 25;97(9):4504-9
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## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

E1	Li <i>et al.</i> Double-stranded RNA injection produces null phenotypes in zebrafish. Dev Biol. 2000 Jan 15;217(2):394-405
E2	Liu <i>et al.</i> Overlapping roles of two Hox genes and the exd ortholog ceh-20 in diversification of the C. elegans postembryonic mesoderm. Development. 2000 Dec;127(23):5179-90
E3	Liu <i>et al.</i> Essential roles for Caenorhabditis elegans lamin gene in nuclear organization, cell cycle progression, and spatial organization of nuclear pore complexes. Mol Biol Cell. 2000 Nov;11(11):3937-47
E4	Lohmann <i>et al.</i> Silencing of developmental genes in Hydra. Dev Biol. 1999 Oct 1;214(1):211-4
E5	Maine. A conserved mechanism for post-transcriptional gene silencing? Genome Biol. 2000;1(3):REVIEWS1018
E6	Maitra. Catalytic cleavage of an RNA target by 2-5A antisense and RNase L. J Biol Chem 1995 Jun 23;270(25):15071-5
E7	Marx. Interfering with gene expression. Science. 2000 May 26;288(5470):1370-2
E8	Matzke <i>et al.</i> How and Why Do Plants Inactivate Homologous (Trans)genes? Plant Physiol. 1995 Mar;107(3):679-685
E9	Mello <i>et al.</i> Efficient gene transfer in C.elegans: extrachromosomal maintenance and integration of transforming sequences. EMBO J. 1991 Dec;10(12):3959-70
E10	Mello <i>et al.</i> DNA transformation. Methods Cell Biol. 1995;48:451-82
E11	Metzlaff <i>et al.</i> RNA-mediated RNA degradation and chalcone synthase A silencing in petunia. Cell. 1997 Mar 21;88(6):845-54
E12	Mette <i>et al.</i> Transcriptional silencing and promoter methylation triggered by double-stranded RNA. EMBO J. 2000 Oct 2;19(19):5194-201
E13	Melendez <i>et al.</i> Caenorhabditis elegans lin-13, a member of the LIN-35 Rb class of genes involved in vulval development, encodes a protein with zinc fingers and an LXCXE motif. Genetics. 2000 Jul;155(3):1127-37
E14	Misquitta <i>et al.</i> Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): a role for nautilus in embryonic somatic muscle formation. Proc Natl Acad Sci U S A. 1999 Feb 16;96(4):1451-6
E15	Montgomery <i>et al.</i> Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. Trends Genet. 1998 Jul;14(7):255-8
E16	Montgomery <i>et al.</i> RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. Proc Natl Acad Sci U S A. 1998 Dec 22;95(26):15502-7
E17	Nakano <i>et al.</i> RNA interference for the organizer-specific gene Xlim-1 in Xenopus embryos. Biochem Biophys Res Commun. 2000 Aug 2;274(2):434-9
E18	Nekhai. <i>et al.</i> Peptides Derived from the Interferon-Induced PKR Prevent Activation by HIV-1 TAR RNA. Virology 1996 222:193-200
E19	Nellen <i>et al.</i> What makes an mRNA anti-sense-itive? Trends Biochem Sci. 1993 Nov;18(11):419-23
E20	Ngo <i>et al.</i> Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. Proc Natl Acad Sci U S A. 1998 Dec 8;95(25):14687-92

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## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

F1	Oates <i>et al.</i> Too much interference: injection of double-stranded RNA has nonspecific effects in the zebrafish embryo. <i>Dev Biol.</i> 2000 Aug 1;224(1):20-8
F2	Oelgeschlager <i>et al.</i> The evolutionarily conserved BMP-binding protein Twisted gastrulation promotes BMP signalling. <i>Nature.</i> 2000 Jun 15;405(6788):757-63
F3	Paddison, P.J. <i>et al.</i> RNA interference: the new somatic cell genetics? <i>Cancer Cell.</i> 2002 Jul;2(1):17-23
F4	Pal-Bhadra <i>et al.</i> RNAi related mechanisms affect both transcriptional and posttranscriptional transgene silencing in <i>Drosophila</i> . <i>Mol Cell</i> 2002 Feb;9(2):315-27
F5	Parrish <i>et al.</i> Functional anatomy of a dsRNA trigger: differential requirement for the two trigger strands in RNA interference. <i>Mol Cell.</i> 2000 Nov;6(5):1077-87
F6	Pichler <i>et al.</i> OOC-3, a novel putative transmembrane protein required for establishment of cortical domains and spindle orientation in the P(1) blastomere of <i>C. elegans</i> embryos. <i>Development.</i> 2000 May;127(10):2063-73
F7	Pineda <i>et al.</i> Searching for the prototypic eye genetic network: Sine oculis is essential for eye regeneration in planarians. <i>Proc Natl Acad Sci U S A.</i> 2000 Apr 25;97(9):4525-9
F8	Plasterk <i>et al.</i> The silence of the genes. <i>Curr Opin Genet Dev.</i> 2000 Oct;10(5):562-7
F9	Pratt <i>et al.</i> Regulation of in vitro translation by double-stranded RNA in mammalian cell mRNA preparations. <i>Nucleic Acids Res.</i> 1988 Apr 25;16(8):3497-510
F10	Proud. PKR: a new name and new roles. <i>Trends Biochem Sci.</i> 1995 Jun;20(6):241-6
F11	Ratcliff <i>et al.</i> A Similarity Between Viral Defense and Gene Silencing in Plants. <i>Science.</i> 1997;276:1558-60
F12	Rocheleau. Wnt signaling and an APC-related gene specify endoderm in early <i>C. elegans</i> embryos. <i>Cell.</i> 1997 Aug 22;90(4):707-16
F13	Sanchez-Alvarado <i>et al.</i> Double-stranded RNA specifically disrupts gene expression during planarian regeneration. <i>Proc Natl Acad Sci U S A.</i> 1999 Apr 27;96(9):5049-54
F14	Sawa <i>et al.</i> Components of the SWI/SNF complex are required for asymmetric cell division in <i>C. elegans</i> . <i>Mol Cell.</i> 2000 Sep;6(3):617-24
F15	Scherr, M. <i>et al.</i> Gene silencing mediated by small interfering RNAs in mammalian cells. <i>Curr Med Chem.</i> 2003 Feb;10(3):245-56
F16	Seydoux <i>et al.</i> Repression of gene expression in the embryonic germ lineage of <i>C. elegans</i> . <i>Nature.</i> 1996 Aug 22;382(6593):713-6
F17	Sharp. RNAi and double-strand RNA. <i>Genes Dev.</i> 1999 Jan 15;13(2):139-41
F18	Sharp <i>et al.</i> Molecular biology. RNA interference. <i>Science.</i> 2000 Mar 31;287(5462):2431-3
F19	Shi <i>et al.</i> Genetic interference in <i>Trypanosoma brucei</i> by heritable and inducible double-stranded RNA. <i>RNA.</i> 2000 Jul;6(7):1069-76
F20	Shippy <i>et al.</i> Analysis of maxillopedia expression pattern and larval cuticular phenotype in wild-type and mutant <i>tribolium</i> . <i>Genetics.</i> 2000 Jun;155(2):721-31

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LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT <b>Mello, Craig C. et al.</b>	
		FILING DATE <b>August 20, 2003</b>	GROUP <b>1637</b>

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	G1	Stam <i>et al.</i> Annals of Botany. 1997;79:3-12
	G2	Stauber <i>et al.</i> Function of bicoid and hunchback homologs in the basal cyclorrhaphan fly <i>Megaselia</i> (Phoridae). Proc Natl Acad Sci U S A. 2000 Sep 26;97(20):10844-9
	G3	Suzuki <i>et al.</i> Activation of target-tissue immune-recognition molecules by double-stranded polynucleotides. Proc Natl Acad Sci U S A. 1999 Mar 2;96(5):2285-90
	G4	Svoboda <i>et al.</i> Selective reduction of dormant maternal mRNAs in mouse oocytes by RNA interference. Development 2000 Oct;127(19):4147-56
	G5	Tabara <i>et al.</i> RNAi in <i>C. elegans</i> : soaking in the genome sequence. Science. 1998 Oct 16;282(5388):430-1
	G6	Tabara <i>et al.</i> The <i>rde-1</i> gene, RNA interference, and transposon silencing in <i>C. elegans</i> . Cell. 1999 Oct 15;99(2):123-32
	G7	Tabara <i>et al.</i> <i>pos-1</i> encodes a cytoplasmic zinc-finger protein essential for germline specification in <i>C. elegans</i> . Development. 1999 Jan;126(1):1-11
	G8	Tavernarakis <i>et al.</i> Heritable and inducible genetic interference by double-stranded RNA encoded by transgenes. Nat Genet. 2000 Feb;24(2):180-3
	G9	Thompson. Shortcuts from gene sequence to function. Nat Biotechnol. 1999 Dec;17(12):1158-9
	G10	Timmons <i>et al.</i> Specific interference by ingested dsRNA. Nature. 1998 Oct 29;395(6705):854
	G11	Tuschl <i>et al.</i> Targeted mRNA degradation by double-stranded RNA in vitro. Genes Dev. 1999 Dec 15;13(24):3191-7
	G12	Ui-Tei <i>et al.</i> Sensitive assay of RNA interference in <i>Drosophila</i> and Chinese hamster cultured cells using firefly luciferase gene as target. FEBS Lett. 2000 Aug 18;479(3):79-82
	G13	Wagner <i>et al.</i> Double-stranded RNA poses puzzle. Nature. 1998 Feb 19;391(6669):744-5
	G14	Wang <i>et al.</i> Rapid kinetic studies link tetrahydrobiopterin radical formation to heme-dioxy reduction and arginine hydroxylation in inducible nitric-oxide synthase. J Biol Chem. 2001 5;276:315-9
	G15	Wargelius <i>et al.</i> Double-stranded RNA induces specific developmental defects in zebrafish embryos. Biochem Biophys Res Commun. 1999 Sep 16;263(1):156-61
	G16	Waterhouse <i>et al.</i> Virus resistance and gene silencing in plants can be induced by simultaneous expression of sense and antisense RNA. Proc Natl Acad Sci U S A. 1998 10;95(23):13959-64
	G17	Waterston <i>et al.</i> A survey of expressed genes in <i>Caenorhabditis elegans</i> . Nat Genet. 1992 May;1(2):114-23
	G18	Wianny <i>et al.</i> Specific interference with gene function by double-stranded RNA in early mouse development. Nat Cell Biol 2000 Feb;2(2):70-5
	G19	Willert <i>et al.</i> A <i>Drosophila</i> Axin homolog, Daxin, inhibits Wnt signaling. Development. 1999 Sep;126(18):4165-73
	G20	Williams <i>et al.</i> ARGONAUTE1 is required for efficient RNA interference in <i>Drosophila</i> embryos. Proc Natl Acad Sci U S A 2002 May 14;99(10):6889-94
Examiner		Date Considered
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